ABSTRACT

Disclosed are one method and one apparatus which enable a non-reciprocal microwave resonator to be coupled in and out at various positions showing the circular symmetry. As such, the transmission phase, but not the amplitude, can be varied, resulting in the operation of a digital phaser. The resonator is electrically connected to two network feeders each of which provides separate phase selectivity. The overall phase selectivity of the phaser is the product of the selectivities of these two network feeders, resulting in a less volume, and hence reduced fabrication costs.